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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,576	03/08/2002	Shailesh P. Mehta	P2T-1	1429

7590

12/01/2004

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EXAMINER

SIEFKE, SAMUEL P

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,576

Applicant(s)

MEHTA, SHAILESH P.

Examiner

Samuel P Siefke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 6,122,599. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim a conduit creating a constraining path permitting fluid communication between a first and a second fluid reservoir; a first pair of electrodes being positioned in a nonencircling arrangement and defining a unique line there between; an active mode that establishes an electric field in constraining path, a passive mode measuring the change due to the presence of a particle in the constraining path; a second pair of optrodes (electrode or optode) being positioned in a non-encircling arrangement and defining a unique line there between. The instant claims specify optrodes (either electrodes or optodes) whereas the claims of 6,122,599

are limited to electrodes. As the instant claims recite both, they are fully encompassed by the claims of 6,122,599 which specify electrodes only.

Claim Objections

Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 3 should depend from claim 1 not claim 2.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the

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remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 15 recites the broad recitation "optrodes", and the claim also recites optrode measures fluorescence which is the narrower statement of the range/limitation. The Applicant has defined an optrode as either an optode or an electrode. An electrode cannot measure fluorescence.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1-14** and **16** are rejected under 35 U.S.C. 102(b) as being anticipated by Mehta CA 2,229,528.

Mehta discloses an apparatus for analyzing particles suspended in fluid. The fluid and particles move from a first fluid-containing portion to a second fluid-containing portion through a conduit or aperture. A first pair of electrode, each electrode of the pair being in a respective fluid-containing portion. A constricted electrical path is defined between the first and second electrodes, and the path extends along the aperture. At least one other pair of electrodes is positioned in a non-encircling arrangement, and are aligned with each other and transversed to the constricted electrical path (abstract).

The electrodes can work in a passive or active state. When active the electrodes establish an electric or electromagnetic field in the constraining path. When the electrodes are in a passive state they measure the changes in the field due to the presence of the particle in the constraining path (bottom page 8 to top page 9). The apparatus further comprises a second pair of electrodes, the second pair of electrodes including a third and a fourth electrode. The second pair being positioned in a non-encircling arrangement and defining a unique line there between (claim 1). The first and second pair of electrodes lies in substantially the same plane (claim 5). The conduit includes an internal wall surface, and the first aperture and a second aperture is defined therein. The first and second apertures are aligned and located on opposite sides of the conduit and define a line there between, extending in a direction transverse to the longitudinal axis. The first electrode is positioned in the first aperture and the second electrode is positioned in the second aperture (claim 7, 11). The apparatus further comprises a plurality of conduits each creating a corresponding distinct path for fluid communication between the first and second fluid containing portions. Each conduit includes an internal cross-section area defined in a direction perpendicular to the longitudinal axis (claim 7,9,12). The apparatus further comprises an electroporation device, the device being electromagnetically couple to electroporation electrodes establishing an electromagnetic field so that particles passing through the constraining path are subjected to high electric field (claim 15). A cell sorting means is disclosed (page 27).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Fisher (USPN 5,376,878).

Fisher discloses an apparatus for counting and measuring the size of particles that comprises a membrane 10 containing multiple apertures 12 (considered constricted from main fluid flow) providing the only means of continuity between two fluid reservoirs 16 and 18. Electrodes 20 and 22 mounted one in each reservoir and another electrode 14 situated inside each aperture forming part of the wall. The position of electrode 14 effectively divides the aperture into two aperture regions 28 and 30 having similar electrical resistances. In use a conductive fluid containing (different electromagnetic and optical properties than particle) the particles is placed into reservoir 16 and aspirated through the apertures into reservoir 18.

Response to Arguments

Applicant's arguments filed 9/15/04 have been fully considered but they are not persuasive. Applicant argues, "the present invention utilizes an optrode, whereas the cited reference has no teaching or disclosure of an optrode as defined in the specification of the present application." The Examiner would like to point to the Applicant's specification where optrode is defined as used herein means either an electrode or optode or a combination thereof. Therefore the prior art can be either an optode or an electrode, the later being the case in 5,376,878.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

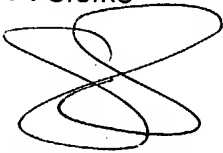
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel P Siefke whose telephone number is 571-272-1262. The examiner can normally be reached on M-F 7:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam P. Siefke



November 26, 2004



Jill Warden
Supervisory Patent Examiner
Technology Center 1700